A New Approach for Cancelable Iris Recognition

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Abstract

The iris is a stable and reliable biometric for positive human identification. However, the traditional iris recognition scheme raises several privacy concerns. One's iris pattern is permanently bound with him and cannot be changed. Hence, once it is stolen, this biometric is lost forever as well as all the applications where this biometric is used. Thus, new methods are desirable to secure the original pattern and ensure its revocability and alternatives when compromised. In this paper, we propose a novel scheme which incorporates iris features, non-invertible transformation and data encryption to achieve "cancelability" and at the same time increases iris recognition accuracy.